

Patent Claims

1. Stator for an eccentric screw pump or an eccentric worm motor,
which includes an outer tube that is provided with a lining of
rubber or a rubber-like material and has a hollow space or
cavity, in the shape of a double or multiple spiral, for
accommodating a rigid rotor that is also in the form of a spiral,
whereby the stator respectively has one spiral more than does
the rotor, and the outer tube has a configuration such that the
thickness of the lining is uniform or nearly uniform, characterized
in that two inner tubes that are provided with apertures are
disposed in the lining.
2. Stator for an eccentric screw pump or an eccentric worm motor
having a stator, including an outer tube that is provided with a
lining of rubber or a rubber-like material and has a hollow space
or cavity, in the shape of a double or multiple spiral, for
accommodating a rigid rotor that is also in the form of a spiral,
whereby the spiral of the stator respectively has one spiral more
than does the rotor, characterized in that a sealing ring is
disposed at the end face of the lining and seals the transition
from the lining to the outer tube.

3. Stator according to claim 1, characterized in that the inner tubes are made of metal.

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4. Stator according to claim 1, characterized in that the size and number of the apertures of the two inner tubes differ.

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5. Stator according to claim 1, characterized in that the second inner tube, which is disposed in the first inner tube, has apertures having a smaller diameter than those of the inner tube but being present in a greater number.

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6. Stator according to claim 1, characterized in that the inner inner tube, instead of being surrounded by the second inner tube, is surrounded by a hose of elastomeric material, especially of rubber.

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7. Stator according to claim 6, characterized in that the hose is provided with apertures.

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8. Stator according to claim 2, characterized in that the sealing ring is connected with the outer tube via welding.
9. Stator according to claim 2, characterized by a press fit between sealing ring and outer tube.
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10. Stator according to claim 2, characterized in that the sealing ring has a conical section that is spaced from the inner side of the outer tube and that opens toward the interior of the stator and toward the lining.
11. Stator according to claim 2, characterized in that the sealing ring has a sealing bead at that end thereof that faces the lining.
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12. Stator according to claim 2, characterized in that a clamping ring is disposed on the sealing ring that presses the sealing ring against the lining.
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13. Method for the manufacture of a stator according to claim 1, characterized in that the outer tube and the inner tubes are produced from cylindrical tubes that are first fitted together and

interconnected, and subsequently have imparted to them the spiral shape.